

IN THE CLAIMS

Please cancel Claims 4, 7, 9, 10, and 14 without prejudice or disclaimer.

Claim 1 (previously presented): An amplifier apparatus for use with a sensor; the apparatus comprising:

(a) a first amplifying circuit segment and a second amplifying circuit segment; said first and second amplifying circuit segments being coupled with said sensor and cooperating to effect substantially balanced handling of signals received from said sensor; each of said first and second amplifying circuit segments including a first transistor device coupled in parallel with a second transistor device;

(b) a feedback unit coupled with said first and second amplifying circuit segments; said feedback unit receiving signals from each of said first transistor device and said second transistor device in each of said first and second amplifier circuit segments; said feedback unit providing feedback signals to at least one of said first transistor device and said second transistor device in each of said first and second amplifier circuits to effect substantially balanced signal handling of signals by said first transistor device in each of said first and second amplifying circuit segments and to effect substantially balanced signal handling of signals by said second transistor device in each of said first and second amplifying circuit segments,

wherein said first transistor device is a metal-oxide transistor device and wherein said second transistor device is a bipolar transistor device.

Claim 2 (original): An amplifier apparatus for use with a sensor as recited in Claim 1 wherein said sensor is a read head in a data storage device.

Claims 3 and 4 (cancelled).

Claim 5 (currently amended): An apparatus for use with a sensor; the apparatus comprising:

(a) a first signal treating circuit segment and a second signal treating circuit segment; said first and second signal treating circuit segments being coupled with said sensor for presenting a substantially balanced differential signaling representation of output signals from said sensor; each respective signal treating circuit segment of said first and second signal treating circuit segment segments comprising a plurality of circuit elements having asymmetric signal handling characteristics coupled in parallel and establishing a plurality of parallel asymmetric signal paths; and

(b) a feedback circuit coupled with said first and second signal treating circuit segments; said feedback circuit providing various feedback signals to selected circuit elements of said plurality of circuit elements in each of said first and second signal treating circuit segments; said various feedback signals effecting substantially balanced signal handling among particular circuit elements of said selected circuit elements having symmetric signal handling characteristics in each said respective signal treating circuit segment,

wherein said two circuit elements are a metal-oxide transistor and a bipolar transistor.

Claim 6 (original): An apparatus for use with a sensor as recited in Claim 5 wherein said sensor is a read head in an information storage device.

Claims 7-10 (cancelled).

Claim 11 (currently amended): A differential amplifier apparatus for use with a sensor; the apparatus comprising:

(a) a differential signal handling unit coupled with said sensor and including two signal handling sections receiving read signals from said sensor; said two signal handling sections effecting substantially balanced signal handling of said read signals to establish said differential signal handling; each respective signal handling section of said two signal handling sections including two semiconductor circuit elements coupled in parallel; said two semiconductor circuit elements having different signal handling characteristics; and

(b) a feedback unit coupled with said differential signal handling unit; said feedback unit providing at least one feedback signal to said differential signal handling unit appropriate to effect operating respective semiconductor circuit elements of said two semiconductor circuit elements having like signal handling characteristics in substantial symmetry,

wherein one of said two semiconductor circuit elements are is a metal-oxide transistor and one of said two semiconductor circuit elements is a bipolar transistor.

Claim 12 (original): A differential amplifier apparatus for use with a sensor as recited in Claim 11 wherein said sensor is a read head in an information storage device.

Claims 13 and 14 (cancelled).